

Alabama Department of Environmental Management

ALABAMA TANK TRUST FUND

REASONABLE RATE SCHEDULE

June 2003

ALABAMA TANK TRUST FUND
REASONABLE RATE SCHEDULE
EFFECTIVE JUNE 1, 2003

The current Alabama Tank Trust Fund Reasonable Rate Schedule has been prepared to provide tank owners/operators and approved Alabama Tank Trust Fund Response Action Contractors with the reasonable allowable rates for certain activities listed. The enclosed list includes typical activities for which the Department has established reasonable allowable rates. Activities not listed or listed as site specific rates on the schedule will be evaluated through the cost proposal and payment request process and approval and reimbursement will be based on the typical rates charged for those types of activities.

The reasonable allowable rates have been established based on a review of ADEM payment requests received and based on surveys conducted by the Department of laboratories, contractors and consulting firms. For some activities, Tank Trust Fund Response Action Contractors may be able to charge lower rates than those listed on the attached pages. In this situation, the Tank Trust Fund Contractor should only charge the actual cost of conducting that activity. Tank Trust Fund activities should not be charged at a higher rate than would be typically charged at a non-Trust Fund site. The Department will only reimburse actual expenses and proper documentation must be submitted with the payment request in order to receive reimbursement.

This rate schedule will begin to be utilized for cost proposals received after June 1, 2003. Cost proposals approved prior to June 1, 2003 should adhere to the amount approved for that cost proposal.

GENERAL INFORMATION

Please note the brief description of the following Alabama Tank Trust Fund policies and procedures:

Eligibility of Releases

The Alabama Tank Trust Fund only covers motor fuel releases from aboveground and underground storage tank systems that are determined to be eligible for participation in the Trust Fund. Tank owners/operators are notified of eligibility by the Department at the time that the Department requires additional assessment and/or remediation activities to occur through the issuance of a "Notification of Requirement to Conduct Investigative and Corrective Action" letter.

Cost Proposals

It is a regulatory requirement that a cost proposal is submitted which proposes the cost for performing required site activities. In order to receive reimbursement for site costs, the cost proposals shall be submitted prior to the initiation of the site activities, unless otherwise directed by the Department. The Department will review the scope of work and the proposed costs contained in the cost proposal and will issue a letter of approval to the tank owner/operator.

Cost Proposal Addendum

Where the owner/operator requests an increase in the scope of work and wishes to have those costs covered under the Trust Fund, a cost proposal addendum may be requested to cover additional scopes of work or unforeseen site circumstances. The owner/operator or his Trust Fund Contractor should notify the appropriate ADEM UST Corrective Action Section Project Manager immediately and request an addendum to cover additional eligible and reasonable costs.

Payment Requests

Payment requests are required to be submitted within one year of the date of the associated cost proposal. Scopes of work covered by an approved cost proposal should not be proposed which include site activities that will extend beyond the one-year period. Timesheets or other adequate detailed labor documentation must be submitted with the payment request.

Two copies of the payment requests should be submitted to the following address:

Alabama Department of Environmental Management
Attention: Permits & Services Administrative Section
Post Office Box 301463
Montgomery, Alabama 36130-1463

For further information regarding Trust Fund issues, please refer to the ADEM Administrative Code R.335-6-16 regulations, the "Alabama Underground Storage Tank Release Investigation and Corrective Action" Guidance Manual, or contact any of the ADEM UST Corrective Action Section project managers at (334) 270-5655.

ALABAMA TANK TRUST FUND REASONABLE RATE SCHEDULE

EFFECTIVE 6/1/2003

ANALYTICAL

	<u>METHOD</u>	<u>SOIL</u>	<u>WATER</u>
TPH	5520	\$60	
	418.1/9071	\$50	
	MOD. 8015 GRO	\$80	
	MOD 8015 DRO	\$95	
	4030 (ENSYs)	\$35-\$47	
	4030 (Other Company)	Site Specific	
LEAD	239.2/7420/7421	\$25	\$25
	6010	\$15	\$15
BTEX	8021	\$60	\$60
	602		\$65
	624		\$95
BTEX + MTBE	8021	\$65	\$65
PAH	610		\$130
	8100	\$130	\$120
	8310	\$160	\$150
	625		\$260
VOLATILES	601		\$100
	8010	\$105	\$100
NITRATE	353.3/9200		\$20
SULFATE	375.4/9036/9038		\$20
IRON	200.7/6010		\$20
MOISTURE CONTENT		\$15	
GRAIN SIZE ANAL.		\$40	
DRY BULK DENSITY		\$20	
FRAC. ORG. CARBON		\$40	
SOIL POROSITY		\$20	
PORTABLE GC		\$150/DAY	\$150/DAY

Sample Containers for
lab analyses

Included in Lab Cost

Included in
Lab Cost

FIELD EQUIPMENT

RATE

UNIT

Explosimeter	\$10	Day
Oxygen Meter	\$10	Day
FID	\$50	Day
PID	\$50	Day
Dissolved Oxygen Meter	\$10	Day
pH/Conductivity Meter	\$10	Day
Water Level Indicator	\$10	Day
Oil/Water Interface Probe	\$10	Day
Disposable Bailers	\$7	Bailer

SAFETY EQUIPMENT

RATE

UNIT

LEVEL "D" (includes gloves)	\$10	MAN/DAY
LEVEL "C"	\$20	MAN/DAY
LEVELS "A" OR "B"	AT REASONABLE COST	MAN/DAY

DRILLING

RATE

UNIT

MOB AND DEMOB

Lump Sum Base	\$200	Trip
Mileage	\$1	Mile
Maximum Mob and Demob	\$500	Trip
2" Monitoring Wells (HSA)	\$41	Foot
4" Monitoring Wells (HSA)	\$43	Foot
Soil Boring (HSA)	\$18-\$20	Foot
Hand Augered Borings/Temporary Wells	Materials	Well
Rock Drilling/Coring	Site Specific Rate	Foot
6" Recovery Wells	Site Specific Rate	Foot
Additional Soil Samples	\$20	Sample
Telescoping Wells	Site Specific Rate	Foot
Direct Push Technologies	Site Specific Rate	Day

OFFICE EXPENSES**RATE****UNIT**

Photocopies of Required Documents	\$0.05	Page
Fax Transmittals to ADEM (When Required)	At Cost	Page
Long Distance Phone Charges	At Cost	Call
Cellular Phone Charges	At Cost	Call
Overnight Mail (When Required)	At Cost	Package
Shipping Costs	At Cost	Item/Box
Film Developing	At Cost	Roll
55-Gallon Drums	\$30	Drum

MILEAGE

\$0.36

Mile

PER DIEM *

6 - 12 Hours	11.25	Day
> 12 Hours, but not overnight	\$30	Day
Overnight (Meals and Lodging)	\$75	Day

* Covers field activities only. Overnight stay allowed if greater than 50 miles from homebase and when outside the firm's homebase metropolitan area.

PASS-THROUGH CHARGES:

Limited to maximum of five (5%) percent for each subcontractor invoice. Applicable to subcontracted costs only or for capital expenditures. There is no longer a "cap" on pass-through charges. Applicable to:

- Subcontracted Drilling
- Subcontracted Analytical Services
- Excavation/Transportation/Disposal of contaminated Soils and/or
Groundwater at Treatment/Disposal Facility
- Subcontracted On-Site Treatment Service
- Capital Expenditures
- Utility Bills for remediation systems

NON-REIMBURSABLE ITEMS

Closure Site Assessments
Environmental Audits
Tank Testing (Unless eligible by Rule 335-6-16-.08(3))
Tank System Removals
Tank System Installations
Soil removal costs associated with Closure Activities
Local Phone Charges
Office Equipment (Includes computers)
Camera Rentals or purchases
Vehicle Rental
Fuel Charges
Survey Equipment
Hand Augers and soil samplers
Tool Kits and Hand Tools
Temperature probes
Rush charges not approved by ADEM
Charges presented for payment which exceed actual costs
Charges presented for payment which are not documented on invoices
Charges associated with a non-motor fuel release
Charges associated with a release discovered prior to 10/01/88 for a UST Release
Charges associated with a release discovered prior to 8/1/93 for an AST Release

There are other items that are non-reimbursable. These will be identified through the cost proposal approval process.

NOTE: All payment requests must be submitted within one year of the date of the associated approved cost proposal in order to be eligible for reimbursement.

REASONABLE RATE SCENARIOS

In addition to establishing individual reasonable rates on a unit-type basis, the Department has also developed response action scenarios that indicate based on the Department's review of previously submitted response action reports and payment requests, the costs for contractor personnel to conduct such activities. Various scenarios have been developed and these scenarios are located in the pages following this section.

The scenarios are based on a typical Alabama Tank Trust Fund Contractor with five major job classifications: Clerical, Draftsperson, Technician, Staff Geologist/Engineer, Project Manager, and Professional Geologist (PG)/Professional Engineer (PE). These job categories and their associated average rates were utilized to develop the scenarios. The scenarios consist of four parts: Report/Plan Development, Fieldwork activities, Travel Time and Cost Proposal/Payment Request Preparation.

The purpose of the scenarios is to provide Alabama Tank Trust Fund Contractors with guidance for the preparation of cost proposals. The Department recognizes that each firm may have different personnel and personnel rates within their respective firms. These scenarios illustrate an overall cost for the activity. Individual rates may differ, but the cost for the activity should be similar to these scenarios unless the scope of work is significantly different.

ALABAMA TANK TRUST FUND REPORT & PLAN DEVELOPMENT SCENARIOS

PRELIMINARY INVESTIGATION REPORT

	<u>HOURS</u>	<u>RATE</u>	<u>REASONABLE COST</u>
PROJECT MGR	3	\$ 80	\$ 240
PE/PG	3	\$ 95	\$ 285
STAFF GEOLOGIST/ENGINEER	32	\$ 70	\$ 2,240
DRAFTSMAN	16	\$ 45	\$ 720
CLERICAL	6	\$ 37	\$ 222
			\$ 3,707

SECONDARY INVESTIGATION PLAN

	<u>HOURS</u>	<u>RATE</u>	<u>REASONABLE COST</u>
PROJECT MGR	1	\$ 80	\$ 80
PE/PG	2	\$ 95	\$ 190
STAFF GEOLOGIST/ENGINEER	4	\$ 70	\$ 280
DRAFTSMAN	2	\$ 45	\$ 90
CLERICAL	2	\$ 37	\$ 74
			\$ 714

SECONDARY INVESTIGATION REPORT

	<u>HOURS</u>	<u>RATE</u>	<u>REASONABLE COST</u>
PROJECT MGR	2	\$ 80	\$ 160
PE/PG	4	\$ 95	\$ 380
STAFF GEOLOGIST/ENGINEER	38	\$ 70	\$ 2,660
DRAFTSMAN	14	\$ 45	\$ 630
CLERICAL	10	\$ 37	\$ 370
			\$ 4,200

GROUNDWATER MONITORING PLAN

	<u>HOURS</u>	<u>RATE</u>	<u>REASONABLE COST</u>
PROJECT MGR	1	\$ 80	\$ 80
PE/PG	1	\$ 95	\$ 95
STAFF GEOLOGIST/ENGINEER	2	\$ 70	\$ 140
DRAFTSMAN	0	\$ 45	\$ -
CLERICAL	2	\$ 37	\$ 74
			\$ 389

GROUNDWATER MONITORING REPORT - ONE SAMPLING EVENT

Quarterly Report

	<u>HOURS</u>	<u>RATE</u>	<u>REASONABLE COST</u>
PROJECT MGR	1	\$ 80	\$ 80
PE/PG	1	\$ 95	\$ 95
STAFF GEOLOGIST/ENGINEER	6	\$ 70	\$ 420
DRAFTSMAN	2	\$ 45	\$ 90
CLERICAL	2	\$ 37	\$ 74
			\$ 759

GROUNDWATER MONITORING REPORT - TWO SAMPLING EVENTS

Semi-Annual Report

	<u>HOURS</u>	<u>RATE</u>	<u>REASONABLE COST</u>
PROJECT MGR	2	\$ 80	\$ 160
PE/PG	2	\$ 95	\$ 190
STAFF GEOLOGIST/ENGINEER	12	\$ 70	\$ 840
DRAFTSMAN	4	\$ 45	\$ 180
CLERICAL	4	\$ 37	\$ 148
			\$ 1,518

FREE PRODUCT REMOVAL PLAN

	<u>HOURS</u>	<u>RATE</u>	<u>REASONABLE COST</u>
PROJECT MGR	1	\$ 80	\$ 80
PE/PG	1	\$ 95	\$ 95
STAFF GEOLOGIST/ENGINEER	4	\$ 70	\$ 280
DRAFTSMAN	1	\$ 45	\$ 45
CLERICAL	2	\$ 37	\$ 74
			\$ 574

FREE PRODUCT REMOVAL REPORT

	<u>HOURS</u>	<u>RATE</u>	<u>REASONABLE COST</u>
PROJECT MGR	2	\$ 80	\$ 160
PE/PG	2	\$ 95	\$ 190
STAFF GEOLOGIST/ENGINEER	6	\$ 70	\$ 420
DRAFTSMAN	2	\$ 45	\$ 90
CLERICAL	2	\$ 37	\$ 74
			\$ 934

AQUIFER TEST REPORT

	<u>HOURS</u>	<u>RATE</u>	<u>REASONABLE COST</u>
PROJECT MGR	2	\$ 80	\$ 160
PE/PG	4	\$ 95	\$ 380
STAFF GEOLOGIST/ENGINEER	12	\$ 70	\$ 840
DRAFTSMAN	2	\$ 45	\$ 90
CLERICAL	4	\$ 37	\$ 148
			\$ 1,618

SOIL VAPOR EXTRACTION PILOT TEST REPORT

	<u>HOURS</u>	<u>RATE</u>	<u>REASONABLE COST</u>
PROJECT MGR	4	\$ 80	\$ 320
PE/PG	4	\$ 95	\$ 380
STAFF GEOLOGIST/ENGINEER	12	\$ 70	\$ 840
DRAFTSMAN	2	\$ 45	\$ 90
CLERICAL	4	\$ 37	\$ 148
			\$ 1,778

CAP DEVELOPMENT - RNA

	<u>HOURS</u>	<u>RATE</u>	<u>REASONABLE COST</u>
PROJECT MGR	3	\$ 80	\$ 240
PE/PG	2	\$ 95	\$ 190
STAFF GEOLOGIST/ENGINEER *	16	\$ 70	\$ 1,120
DRAFTSMAN	2	\$ 45	\$ 90
CLERICAL	4	\$ 37	\$ 148
			\$ 1,788

* 8 hours less for Staff Geo/Eng with no modeling performed

**CAP DEVELOPMENT -
SOIL EXCAVATION ONLY**

	<u>HOURS</u>	<u>RATE</u>	<u>REASONABLE COST</u>
PROJECT MGR	2	\$ 80	\$ 160
PE/PG	2	\$ 95	\$ 190
STAFF GEOLOGIST/ENGINEER	6	\$ 70	\$ 420
DRAFTSMAN	2	\$ 45	\$ 90
CLERICAL	4	\$ 37	\$ 148
			\$ 1,008

**CAP DEVELOPMENT-
GROUNDWATER & SOIL REMEDIATION**

	<u>HOURS</u>	<u>RATE</u>	<u>REASONABLE COST</u>
PROJECT MGR	4	\$ 80	\$ 320
PE/PG	14	\$ 95	\$ 1,330
STAFF GEOLOGIST/ENGINEER	82	\$ 70	\$ 5,740
DRAFTSMAN	24	\$ 45	\$ 1,080
CLERICAL	16	\$ 37	\$ 592
			\$ 9,062

ARBCA DATA ACQUISITION PLAN (DAP)

	<u>HOURS</u>	<u>RATE</u>	<u>REASONABLE COST</u>
PROJECT MGR	2	\$ 80	\$ 160
PE/PG	2	\$ 95	\$ 190
STAFF GEOLOGIST/ENGINEER	8	\$ 60	\$ 480
DRAFTSMAN	2	\$ 35	\$ 70
CLERICAL	2	\$ 27	\$ 54
			\$ 954

ARBCA TIER 1 REPORT

	<u>HOURS</u>	<u>RATE</u>	<u>REASONABLE COST</u>
PROJECT MGR	8	\$ 80	\$ 640
PE/PG	8	\$ 95	\$ 760
STAFF GEOLOGIST/ENGINEER	40	\$ 70	\$ 2,800
DRAFTSMAN	12	\$ 45	\$ 540
CLERICAL	4	\$ 35	\$ 140
			\$ 4,880

* Includes reporting of information collected during DAP implementation

ARBCA TIER 2 REPORT

(Without decay)

	<u>HOURS</u>	<u>RATE</u>	<u>REASONABLE COST</u>
PROJECT MGR	1	\$ 80	\$ 80
PE/PG	3	\$ 95	\$ 285
STAFF GEOLOGIST/ENGINEER	8	\$ 70	\$ 560
DRAFTSMAN	1	\$ 45	\$ 45
CLERICAL	4	\$ 37	\$ 148
			\$ 1,118

* Determining biodecay rate, add 24 hr

MONITORING WELL ABANDONMENT PLAN & REPORT

	<u>HOURS</u>	<u>RATE</u>	<u>REASONABLE COST</u>
PROJECT MGR	1	\$ 80	\$ 80
PE/PG	1	\$ 95	\$ 95
STAFF GEOLOGIST/ENGINEER	2	\$ 70	\$ 140
DRAFTSMAN	0	\$ 45	\$ -
CLERICAL	1	\$ 35	\$ 35
			\$ 350

SYSTEM PURCHASE REPORT

Letter stating purchase of system has occurred*

	<u>HOURS</u>	<u>RATE</u>	<u>REASONABLE COST</u>
PROJECT MGR	0	\$80	\$0
PE/PG	1	\$95	\$95
STAFF GEOLOGIST/ENGINEER	0	\$70	\$0
DRAFTSMAN	0	\$45	\$0
CLERICAL	1	\$37	\$37
			\$132

*Applicable for firms who submitted an individual cost proposal for system purchase only

ENGINEERED CA SYSTEM INSTALLATION REPORT

	<u>HOURS</u>	<u>RATE</u>	<u>REASONABLE COST</u>
PROJECT MGR	16	\$80	\$1,280
PE/PG	16	\$95	\$1,520
STAFF GEOLOGIST/ENGINEER	22	\$70	\$1,540
DRAFTSMAN	8	\$45	\$360
CLERICAL	6	\$37	\$222
			\$4,922

SEMR QUARTERLY REPORT - First Report

Submitted after first three months of O&M

Covers 3 months of O&M

	<u>HOURS</u>	<u>RATE</u>	<u>REASONABLE COST</u>
PROJECT MGR	8	\$80	\$640
PE/PG	8	\$95	\$760
STAFF GEOLOGIST/ENGINEER	36	\$70	\$2,520
DRAFTSMAN	4	\$45	\$180
CLERICAL	4	\$37	\$148
			\$4,248

SEMR QUARTERLY REPORT - Subsequent Report

Submitted for three months of O&M

	<u>HOURS</u>	<u>RATE</u>	<u>REASONABLE COST</u>
PROJECT MGR	8	\$80	\$640
PE/PG	8	\$95	\$760
STAFF GEOLOGIST/ENGINEER	24	\$70	\$1,680
DRAFTSMAN	2	\$45	\$90
CLERICAL	4	\$37	\$148
			\$3,318

SEMR SEMI-ANNUAL REPORT - First Report

Submitted after first six months of O&M

Covers 6 months of O&M

	<u>HOURS</u>	<u>RATE</u>	<u>REASONABLE COST</u>
PROJECT MGR	16	\$80	\$1,280
PE/PG	16	\$95	\$1,520
STAFF GEOLOGIST/ENGINEER	60	\$70	\$4,200
DRAFTSMAN	6	\$45	\$270
CLERICAL	8	\$37	\$296
			\$7,566

SEMR SEMI-ANNUAL REPORT - Subsequent Reports

Covers 6 months of O&M

	<u>HOURS</u>	<u>RATE</u>	<u>REASONABLE COST</u>
PROJECT MGR	16	\$80	\$1,280
PE/PG	16	\$95	\$1,520
STAFF GEOLOGIST/ENGINEER	48	\$70	\$3,360
DRAFTSMAN	4	\$45	\$180
CLERICAL	8	\$37	\$296
			\$6,636

RNA QUARTERLY IMPLEMENTATION REPORT (NAMR) - 1st Report

Submitted after first 3 month period of RNA monitoring

One sampling event

	<u>HOURS</u>	<u>RATE</u>	<u>REASONABLE COST</u>
PROJECT MGR	2	\$80	\$160
PE/PG	1	\$95	\$95
STAFF GEOLOGIST/ENGINEER	16	\$70	\$1,120
DRAFTSMAN	2	\$45	\$90
CLERICAL	2	\$37	\$74
			\$1,539

RNA QUARTERLY IMPLEMENTATION REPORT (NAMR) - Subsequent Report

Submitted quarterly		<u>HOURS</u>	<u>RATE</u>	<u>REASONABLE COST</u>
One sampling event				
	PROJECT MGR	2	\$80	\$160
	PE/PG	1	\$95	\$95
	STAFF GEOLOGIST/ENGINEER	8	\$70	\$560
	DRAFTSMAN	2	\$45	\$90
	CLERICAL	2	\$37	\$74
				\$979

RNA SEMI-ANNUAL IMPLEMENTATION REPORT (NAMR) - First Report

Submitted semi-annually		<u>HOURS</u>	<u>RATE</u>	<u>REASONABLE COST</u>
Covers 6 month period of RNA monitoring (2 sampling events)				
	PROJECT MGR	4	\$80	\$320
	PE/PG	2	\$95	\$190
	STAFF GEOLOGIST/ENGINEER	24	\$70	\$1,680
	DRAFTSMAN	4	\$45	\$180
	CLERICAL	4	\$37	\$148
				\$2,518

RNA SEMI-ANNUAL IMPLEMENTATION REPORT (NAMR) - Subsequent Report

Submitted semi-annually		<u>HOURS</u>	<u>RATE</u>	<u>REASONABLE COST</u>
Covers 6 month period of RNA monitoring (2 sampling events)				
	PROJECT MGR	4	\$80	\$320
	PE/PG	2	\$95	\$190
	STAFF GEOLOGIST/ENGINEER	16	\$70	\$1,120
	DRAFTSMAN	4	\$45	\$180
	CLERICAL	4	\$37	\$148
				\$1,958

ALABAMA TANK TRUST FUND COST PROPOSAL AND PAYMENT REQUEST DEVELOPMENT SCENARIOS

The following reasonable rates are for the preparation of cost proposals and payment requests for the activities listed. For those activities not listed, comparisons can be made to a similar "level of effort" activity and that amount can be utilized and will be reviewed by the ADEM.

Activity

			<u>PROJ MGR</u>	<u>CLERICAL</u>
			\$ 80.00	\$ 37.00
Pre-Approved Preliminary Investigation	Cost Proposal	\$ 117	1	1
	Payment Request	\$ 394	4	2
			\$ 80.00	\$ 37.00
Preliminary Investigation	Cost Proposal	\$ 394	4	2
Secondary Investigation Plan/Report	Payment Request	\$ 394	4	2
ARBCA Data Acquisition Plan				
ARBCA Data Acquisition Plan and Tier 1/2 Reports				
Corrective Action Feasibility Study (Aquifer Testing, SVE test, etc.)				
Engineered System CA O&M Report				
			\$ 80.00	\$ 37.00
Groundwater Monitoring Plan	Cost Proposal	\$ 234	2	2
Groundwater Monitoring or RNA Report	Payment Request	\$ 234	2	2
Groundwater Monitoring Plan and Report				
Free Product Removal Plan and Report				
Free Product Removal Report				
Monitoring Well Abandonment Plan and Report				
ARBCA Tier 1 Report				
ARBCA Tier 2 Report				
ARBCA Tier 1 & 2 Report				
CAP Development: Soil, Groundwater and/or Free Product Removal (Engineered Design)				
CAP Development: Groundwater RNA				
CAP Development: Soil Excavation				
			\$ 80.00	\$ 37.00
System Purchase Report	Cost Proposal	\$ 554	6	2
Engineered System CA Installation Report	Payment Request	\$ 394	4	2

ALABAMA TANK TRUST FUND TRAVEL SCENARIOS

The Trust Fund will cover travel time necessary to travel directly from the consultant's home base to the job site and for a return trip. Where a consultant is performing a "round" of assessments, remediation activities or sampling, the travel time should be calculated from the last site where work was performed.

Maximum travel time per one-way trip is 8 hours (or 450 miles), not to exceed 16 hours (or 900 miles) per person round-trip.

Travel time will be approved based on reasonable number of personnel traveling to the job site and appropriate personnel classifications.

ALABAMA TANK TRUST FUND FIELD WORK SCENARIOS

Reasonable costs are listed for typical fieldwork scenarios. For necessary work that is not listed below, proposed rates and hours will be reviewed on an individual basis based on information supplied in the cost proposal.

PRELIMINARY INVESTIGATION			
Install 4 wells	<u>HOURS</u>	<u>RATE</u>	<u>REASONABLE COST</u>
PROJECT MGR	0	\$ 80	\$ -
PE/PG	0	\$ 95	\$ -
STAFF GEOLOGIST/ENGINEER	12	\$ 70	\$ 840
TECHNICIAN	24	\$ 45	\$ 1,080
			\$ 1,920
SECONDARY INVESTIGATION			
Install 8 wells; slug testing	<u>HOURS</u>	<u>RATE</u>	<u>REASONABLE COST</u>
PROJECT MGR	0	\$ 80	\$ -
PE/PG	0	\$ 95	\$ -
STAFF GEOLOGIST/ENGINEER	32	\$ 70	\$ 2,240
TECHNICIAN	36	\$ 45	\$ 1,620
			\$ 3,860
ONE GROUNDWATER MONITORING EVENT			
(Example is for 8 wells)	<u>HOURS</u>	<u>RATE</u>	<u>REASONABLE COST</u>
PROJECT MGR	0	\$ 80	\$ -
PE/PG	0	\$ 95	\$ -
STAFF GEOLOGIST/ENGINEER	0	\$ 70	\$ -
TECHNICIAN Site Set-Up	2	\$ 45	\$ 90
TECHNICIAN - Sampling *	8	\$ 45	\$ 360
			\$ 450
* Approximately 1 hour per well			
2 GROUNDWATER MONITORING EVENTS			
(Example is for 8 wells)	<u>HOURS</u>	<u>RATE</u>	<u>REASONABLE COST</u>
PROJECT MGR	0	\$ 80	\$ -
PE/PG	0	\$ 95	\$ -
STAFF GEOLOGIST/ENGINEER	0	\$ 70	\$ -
TECHNICIAN Site Set-Up	4	\$ 45	\$ 180
TECHNICIAN - Sampling *	16	\$ 45	\$ 720
			\$ 900
* Approximately 1 hour per well			
FREE PRODUCT REMOVAL EVENT - MEME			
	<u>HOURS</u>	<u>RATE</u>	<u>REASONABLE COST</u>
PROJECT MGR	0	\$ 80	\$ -
PE/PG	0	\$ 95	\$ -
STAFF GEOLOGIST/ENGINEER	0	\$ 70	\$ -
TECHNICIAN	10	\$ 45	\$ 450
			\$ 450

AQUIFER TEST 12 HOUR

	<u>HOURS</u>	<u>RATE</u>	<u>REASONABLE COST</u>
PROJECT MGR	0	\$ 80	\$ -
PE/PG	0	\$ 95	
STAFF GEOLOGIST/ENGINEER	18	\$ 70	\$ 1,260
TECHNICIAN	20	\$ 45	\$ 900
			\$ 2,160

AQUIFER TEST 24 HOUR

	<u>HOURS</u>	<u>RATE</u>	<u>REASONABLE COST</u>
PROJECT MGR	0	\$ 80	\$ -
PE/PG	0	\$ 95	
STAFF GEOLOGIST/ENGINEER	30	\$ 70	\$ 2,100
TECHNICIAN	32	\$ 45	\$ 1,440
			\$ 3,540

SOIL VAPOR EXTRACTION PILOT TEST

	<u>HOURS</u>	<u>RATE</u>	<u>REASONABLE COST</u>
PROJECT MGR	3	\$ 80	\$ 240
PE/PG	3	\$ 95	\$ 285
STAFF GEOLOGIST/ENGINEER	16	\$ 70	\$ 1,120
TECHNICIAN	16	\$ 45	\$ 720
			\$ 2,365

MONITORING WELL ABANDONMENT

(Example is for 8 wells)

	<u>HOURS</u>	<u>RATE</u>	<u>REASONABLE COST</u>
PROJECT MGR	0	\$ 80	\$ -
PE/PG	0	\$ 95	\$ -
STAFF GEOLOGIST/ENGINEER	0	\$ 70	\$ -
TECHNICIAN *	8	\$ 45	\$ 360
			\$ 360

* Approximately 1 hr per well

CAP DEVELOPMENT SITE VISIT - SOIL EXCAVATION

	<u>HOURS</u>	<u>RATE</u>	<u>REASONABLE COST</u>
PROJECT MGR	0	\$ 80	\$ -
PE/PG	0	\$ 95	\$ -
STAFF GEOLOGIST/ENGINEER	2	\$ 70	\$ 140
TECHNICIAN	0	\$ 45	\$ -
			\$ 140

CAP DEVELOPMENT SITE VISIT - GW AND SOIL REMEDIATION

	<u>HOURS</u>	<u>RATE</u>	<u>REASONABLE COST</u>
PROJECT MGR	0	\$ 80	\$ -
PE/PG	0	\$ 95	\$ -
STAFF GEOLOGIST/ENGINEER	8	\$ 70	\$ 560
TECHNICIAN	0	\$ 45	\$ -
			\$ 560

SYSTEM INSTALLATION ACTIVITIES WITH ONE GW SAMPLING EVENT

Project oversight w/ one sampling event

	<u>HOURS</u>	<u>RATE</u>	<u>REASONABLE COST</u>
PROJECT MGR	16	\$ 80	\$ 1,280
PE/PG	8	\$ 95	\$ 760
STAFF GEOLOGIST/ENGINEER	56	\$ 70	\$ 3,920
TECHNICIAN	10	\$ 45	\$ 450
			\$ 6,410

Sampling event assumes 8 wells

O&M FIELDWORK - 3 MONTHS OF O&M WITH 1 SAMPLING EVENT

	<u>HOURS</u>	<u>RATE</u>	<u>REASONABLE COST</u>
PROJECT MGR	8	\$ 80	\$ 640
PE/PG	0	\$ 95	\$ -
STAFF GEOLOGIST/ENGINEER	0	\$ 70	\$ -
TECHNICIAN	58	\$ 45	\$ 2,610
			\$ 3,250

Sampling event assumes 8 wells

O&M FIELDWORK - 6 MONTHS OF O&M WITH 2 SAMPLING EVENTS

	<u>HOURS</u>	<u>RATE</u>	<u>REASONABLE COST</u>
PROJECT MGR	16	\$ 80	\$ 1,280
PE/PG	0	\$ 95	\$ -
STAFF GEOLOGIST/ENGINEER	0	\$ 70	\$ -
TECHNICIAN	116	\$ 45	\$ 5,220
			\$ 6,500

Sampling event assumes 8 wells

